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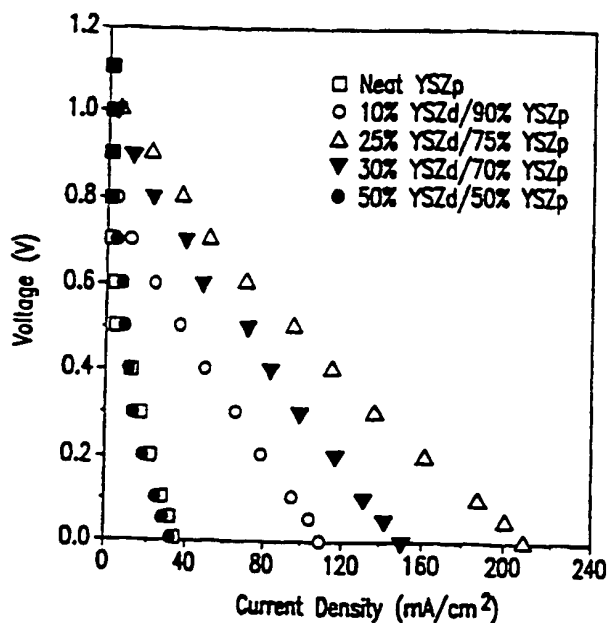
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(54) Title: METHOD FOR SOLID OXIDE FUEL CELL ANODE PREPARATION

(57) Abstract

A method for preparation of an anode for a solid oxide fuel cell in which a plurality of zircon fibers are mixed with a yttria-stabilized zirconia (YSZ) powder, forming a fiber/powder mixture. The fiber/powder mixture is formed into a porous YSZ layer and calcined. The calcined porous YSZ layer is then impregnated with a metal-containing salt solution. Preferred metals are Cu and Ni. An anode and a method for manufacturing a fuel cell containing such anode is also disclosed. Such anode is particularly performant when the fuel cell is fed with dry hydrocarbons, in absence or low content of steam.

EXPRESS MAIL NO. EL 815 472 76805MAILED 31 AUGUST 2001YSZd = dense YSZ  
YSZp = porous YSZ

□  $P_{max} = 5.1 \text{ mW/cm}^2$   
 ○  $P_{max} = 19.4 \text{ mW/cm}^2$   
 △  $P_{max} = 34.6 \text{ mW/cm}^2$   
 ▼  $P_{max} = 4.0 \text{ mW/cm}^2$   
 •  $P_{max} = 19.4 \text{ mW/cm}^2$